

Exhibit A

Edition
28

Dorland's *Illustrated* Medical Dictionary

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mesothelium

1020

metachromatic

diffuse m., malignant m.

localized fibrous m., benign fibrous m.

malignant m., a malignant tumor of the pleura, peritoneum, or pericardium; it appears as broad sheets of cells, with some regions containing spindle-shaped, sarcoma-like cells and other regions showing adenomatous patterns. Many of these tumors, particularly in the pleura and peritoneum, have been linked to excessive exposure to asbestos. Called also *diffuse m.*

peritoneal m., a malignant mesothelioma in the peritoneum, a form linked to heavy asbestos exposure and sometimes accompanying the pleural variety; it may spread to involve the intestines and cause obstruction. Symptoms include ascites, pain, and a mass in the abdomen.

pleural m., a malignant mesothelioma of the pleural space, often spreading widely and invading other thoracic structures; patients are often older men who present with dyspnea, chest pain, and extensive pleural effusions. It is usually fatal within one year.

m. of testis, m. of tunica vaginalis, a malignant mesothelioma of the tunica vaginalis testis, usually first manifesting as a hydrocele; sometimes it is metastatic from the lungs, but not all cases have been linked to asbestos exposure. It often follows a more indolent course than the pleural or peritoneal varieties.

meso-the-li-um (mez'ō-the'le-əm) [*meso-* + *epithelium*] [NA] the layer of flat cells, derived from the mesoderm, which lines the coelom or body cavity of the embryo. In the adult, it forms the simple squamous epithelium which covers all true serous membranes (peritoneum, pericardium, pleura).

mes-oth-e-nar (mōz-ō-the'nōr) [*meso-* + Gr. *thenar* palm] *musculus adductor pollicis*.

mes-o-trop-ic (mez'ō-trop'ik) situated in the middle of a cavity, as the abdomen.

meso-tym-pa-num (mez'ō-tim'pā-nəm) the portion of the middle ear medial to the tympanic membrane.

mes-o-var-i-um (mez'ō-var'ē-əm) [NA] the portion of the broad ligament of the uterus between the mesometrium and mesosalpinx, which is drawn out to enclose and hold the ovary in place.

mes-sen-ger (mes'an-jar) an information carrier.

second m., any of several classes of intracellular signals acting at or situated within the plasma membrane that translate electrical or chemical messages from the environment into cellular responses; such messengers include changes in membrane potential, calcium ions, cyclic nucleotides, and products of phosphatidylinositol turnover.

mes-ter-o-lone (mās-ter'ō-lōn) an androgen with actions and uses similar to those of testosterone.

Mes-ti-non (mes'ti-non) trademark for preparations of pyridostigmine bromide.

mes-tra-nol (mes'trā-nol) [USP] the 3-methyl ether of ethinyl estradiol, used as the estrogen component of several progestin-estrogen oral contraceptives.

mes-u-prine hy-dro-chlo-ride (mes'ū-prēn) chemical name: *N*[2-hydroxy-5-[1-hydroxy-2-(2-(4-methoxyphenyl)ethyl)amino]propyl]phenylmethanesulfonamide monohydrochloride; a vasodilator and smooth muscle relaxant, $C_{18}H_{25}N_2O_5 \cdot HCl$.

mes-u-ran-ic (mez'ū-ran'ik) [*meso-* + Gr. *ouranos* palate] having a maxilloalveolar index between 110.0 and 114.9.

mes-y-late (mes'ā-jāt) USAN contraction for methanesulfonate.

Met methionine.

meta- [Gr. *meta* after, beyond, over] 1. a prefix indicating (a) change, transformation, or exchange or (b) after or next. 2. symbol *m-*; in organic chemistry, a prefix indicating a 1,3-substituted benzene ring, e.g., *m*-xylene (1,3-dimethylbenzene) or *m*-nitrophenol (3-nitrophenol). 3. in organic chemistry, a prefix indicating a polymeric acid anhydride, e.g., metaphosphoric acid.

meta-anal-y-sis (met'ā-nal'ī-sis) [*meta-* + *analysis*] any systematic method that uses statistical analysis to integrate the data from a number of independent studies.

meta-ar-thrit-ic (met'ā-ahr-thrit'ik) occurring as a consequence or result of arthritis.

me-tab-a-sis (mā-tab'ā-sis) [*meta-* + Gr. *bainein* to go] 1. a change in the manifestations or course of a disease. 2. metastasis, or change in the site of a morbid process from one region of the body to another.

meta-bi-o-sis (met'ā-bi-ō'sis) [*meta-* + Gr. *biōsis* way of life] the dependence of one organism upon another for its existence; commensalism.

met-a-bol-ic (met'ā-bol'ik) pertaining to or of the nature of metabolism.

met-a-bo-lim-e-ter (met'ā-bo-lim'ā-tar) [*metabolism* + *meter*] an apparatus for measuring basal metabolism.

met-a-bo-lim-e-try (met'ā-bō-lim'ō-tre) the measurement of basal metabolism.

me-tab-o-lism (mā-tab'ō-liz'əm) [Gr. *metaballein* to turn about, change, alter] 1. the sum of all the physical and chemical processes by which living organized substance is produced and maintained (anabolism), and also the transformation by which energy is made available for the uses of the organism (catabolism). 2. biotransformation.

ammonotelic m., that in which ammonia is the final product of nitrogen metabolism.

basal m., the minimal energy expended for the maintenance of respiration, circulation, peristalsis, muscle tonus, body temperature, glandular activity, and the other vegetative functions of the body. The rate of basal metabolism (basal metabolic rate) is measured by means of a calorimeter, in a subject at absolute rest, 14 to 18 hours after eating, and is expressed in calories per hour per square meter of body surface.

drug m., biotransformation of drugs.

endogenous m., metabolism of the proteins of the body tissues.

energy m., the metabolic processes by which energy is released.

excess m. of exercise, the amount by which the oxygen consumed or the carbon dioxide eliminated during exercise and recovery exceeds the corresponding amounts during sleep.

exogenous m., metabolism of ingested foodstuffs.

inborn error of m., a genetically determined biochemical disorder in which a specific enzyme defect produces a metabolic block that may have pathologic consequences at birth (e.g., phenylketonuria) or in later life (e.g., diabetes mellitus); called also *enzymopathy* and *genetotropic disease*.

intermediary m., the various chemical reactions involved in the transformation of food molecules into essential cellular building blocks.

ureotelic m., that in which urea is the final product of nitrogen metabolism.

uricotelic m., that in which uric acid is the final product of nitrogen metabolism.

me-tab-o-lite (mā-tab'ō-lit) any substance produced by metabolism or by a metabolic process.

essential m., a necessary constituent of normal metabolic processes.

me-tab-o-liz-a-ble (mā-tab'ō-liz'ā-bəl) capable of being transformed by metabolism.

meta-brom-sa-lan (met'ā-brom'sā-lan) a disinfectant with antibacterial and antifungal activities used mainly in medicated soaps.

meta-bu-teth-amine hy-dro-chlo-ride (met'ā-bu-teth'ā-mēn) a local anesthetic used in dentistry to produce infiltration and nerve block anesthesia.

meta-bu-toxy-caine hy-dro-chlo-ride (met'ā-bu-tok'sā-kān) chemical name: 3-amino-2-butoxybenzoic acid 2-diethylaminoethyl ester hydrochloride. A local anesthetic, $C_{17}H_{23}N_2O_3 \cdot HCl$, used in dentistry.

meta-car-pal (met'ā-kahr'pāl) 1. pertaining to the metacarpus. 2. a bone of the metacarpus.

meta-car-pec-to-my (met'ā-kahr-pek'tō-me) excision or resection of a metacarpal bone.

meta-car-po-pha-lan-ge-al (met'ā-kahr'pō-fā-lan'je-əl) pertaining to the metacarpus and phalanges.

meta-car-pus (met'ā-kahr'pas) [*meta-* + Gr. *karpos* wrist] the part of the hand between the wrist and the fingers, its skeleton being five cylindrical bones (metacarpals) extending from the carpus to the phalanges. See also *ossa metacarpi*, under *os*.

met-a-cele (met'ā-sēl) metacoele; see *metacoeloma*.

meta-cent-ric (met'ā-sen'trik) [*meta-* + *center* (def. 1)] having the centromere near the middle, so that the arms of the chromosome are approximately equal in length. Cf. *acrocentric* and *submetacentric*.

meta-cer-car-ia (met'ā-sār-kar'ē-ā) pl. *metacercariae*. The encysted resting or maturing stage of a trematode parasite in the tissues of an intermediate host (mollusks, aquatic arthropods, fishes, or amphibia) or on vegetation. The metacercaria may be the infective or transfer stage to man and other animals.

meta-chro-ma-sia (met'ā-kro-mā'zhā) [*meta-* + Gr. *chrōma* color] 1. a condition in which tissues do not stain true with a given stain. 2. staining in which the same stain colors different tissues in different tints. 3. the change of color produced by staining.

meta-chro-mat-ic (met'ā-kro-mat'ik) [*meta-* + Gr. *chrōmatikos* relating to color] staining differently with the same dye; said of tissues in which different elements take on different colors when a